

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

FEB 0 8 2013

REPLY TO: 6WQ-NP

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7010 2780 0002 4355 9043)

Mr. Erwin Pino Chaparral Energy, L.L.C. 701 Cedar Lake Blvd. Oklahoma City, OK 73114

Re:

Underground Injection Control Permit No. 06S1264P6273

Final Permit Modification Osage County, Oklahoma

Dear Mr. Pino:

Enclosed is a copy of the final permit modification referenced above. Final permit conditions, including the modification, shall remain in effect until the well is plugged and abandoned or the permit is terminated.

If you have any questions, please contact Ms. Jenaie Franke in Dallas at (214) 665-7514.

Sincerely yours,

(W William K. Honker, P.E.

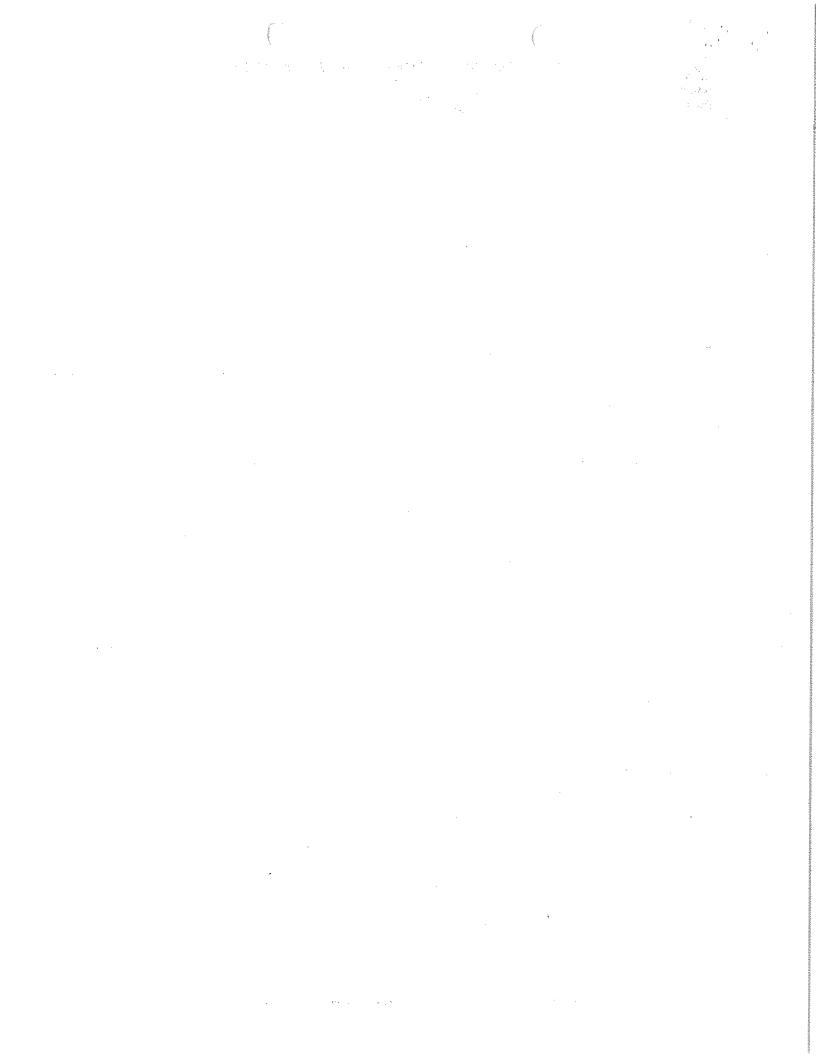
Director

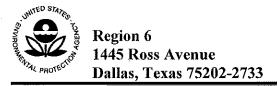
Water Quality Protection Division

Enclosures

cc: w/enclosures:

BIA, Minerals Branch Osage UIC Office





UIC Permit No.: 06S1264P6273 Area Permit North Burbank

MODIFICATION TO ENVIRONMENTAL PROTECTION AGENCY OSAGE COUNTY UIC PROGRAM

Permit No. **06S1264P6273** Dated: April 3, 2012

Permit location as describe by Permit No. 06S1264P6273 has been revised to read as follows:

the S/2 of Section 1, all of Section 2, SE/4 of Section 3, E/2 of Section 10, all of Section 11, all of Section 12, all of Section 13, all of Section 14, E/2 of Section 15, E/2 Section 22, all of Section 23, all of Section 24, all of Section 25, all of Section 26, all of Section 35, and all of Section 36, all in Township 27N, Range 5E.

All of Section 7, W/2 Sec 17, all of Section 18, all of Section 19, all of Section 20, SW/4 Sec 28, all of Section 29, all of Section 30, all of Section 31, all of Section 32, W/2 & SE/4 Sec 33, all in Township 27N, Range 06E

Permit conditions I.A.3. and I.B.1. prescribed by Permit No. 06S1261P5123 have been revised to read as follows:

- I.A.3. For those existing wells without surface casing or whose surface casing does not extend at least 50 feet below the USDW, the outermost casing(s) must be cemented at least 50' below the USDW to surface.
- I.A.4. Prior to initial authorization to inject for individual wells, the permittee shall provide evidence to the Director of compliance with Parts I. A. 1. A.2, and A.3. above by submission of a cementing record, a cement bond log, temperature log, historical cementing records, or other well information sufficient to demonstrate and provide assurance that cement has been placed above the producing formation to adequately meet the requirements of Permit Section I.A.1, I.A.2, or I.A.3, whichever is applicable.
- I.D.3. Before receiving authorization to inject for any well authorized under this permit, the permittee shall submit to the Chief a copy of a report showing construction details of each monitoring well required under Parts I. C. 6. or I. D. 1. for the

nearest quarter sections to the AOR of the well requested for authorization to inject.

I.F.1. The permittee shall demonstrate, to the satisfaction of the Director, that the injection well has no significant leak in the casing/tubing annulus and allows no fluid migration through vertical channels behind the casing pursuant to 40 CFR §147.2920(b) (1) (i) and (2) (ii) or (iii) respectively. The demonstration of mechanical integrity (MI) must be made at least once every five years thereafter. The Director may require increased frequency of this testing if circumstances deem it prudent. To acquire authorization to inject (ATI), the permittee must submit a successful MI demonstration and proof of cement behind the well's casing(s) per condition I.A.4. The Chief may issue ATI either verbally or in writing upon finding the well is compliant with the corrective action, monitoring well and injection well construction and MI requirements of this permit.

This modification is part of the permit and shall be attached thereto in accordance with 40 CFR Subpart GGG, §147.2927.

This permit modification shall become effective

FEB 0 8 2013

Prepared by

Arnold Bierschenk

Environmental Scientist

Ground Water/UIC Section

Issued on

FEB 0 8 2013

William K. Honker, P.E.

Director

Water Quality Protection Division

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Part II. CONDITIONS APPLICABLE TO ALL PERMITS - OSAGE

A. Confidentiality

Any information except the permittee's name and address and information concerning the existence, absence or level of contaminants in drinking water may be claimed as confidential. Any claim of confidentiality must be asserted at the time of submission. If no claim is made, EPA may make the information available to the public without further notice.

B. Duty to Comply

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification.

Compliance with the terms of this permit does not constitute a defense to any action brought under Section 1431 of the Safe Drinking Water Act (SDWA) of any other law for any imminent or substantial endangerment to human health of the environment or for any breach of any other applicable legal duty.

2. The permittee need not comply with the provisions of this permit to the extent and for the duration such noncompliance is authorized in a temporary emergency permit under 40 CFR §147.2906.

C. <u>Duty to Halt or Reduce Activity</u>

It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

E. Proper Operation and Maintenance

- 1. All injections wells must have and maintain mechanical integrity consistent with 40 CFR §147.2920(b). Mechanical integrity must be demonstrated initially and also any time the tubing is removed from the well, the packer is reset, or a loss of mechanical integrity becomes evident during operation. Furthermore, the Regional Administrator (RA) may by written notice require the permittee to demonstrate mechanical integrity at anytime. The permittee shall notify the Osage UIC office of his intent to prove mechanical integrity at least 5 days prior to such demonstration. The permittee shall report the results of the mechanical integrity demonstration within 30 days after completion (unless the demonstration is witnessed by an EPA inspector, in which case the inspector will prepare the report).
- 2. If the permittee or the RA finds that the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR §147.2920(b), becomes evident during operation, the operation shall be halted immediately and shall not be resumed until the RA gives approval to recommence injection.
- 3. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate engineering capability available, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

F. Permit Actions

- 1. This permit may be modified, revoked and reissued, or terminated for the following causes (see 40 CFR §147.2927 and 40 CFR §147.2928):
 - a) There are substantial changes to the facility or activity which occurred after permit issuance that justify revised or additional permit conditions.
 - a) The RA has received information (e.g., from monitoring reports, inspections) which warrants a modified permit.
 - b) The regulations or standards on which the permit was based have changed.
 - c) The RA has received notice of a proposed permit transfer.
 - d) An interested person requests in writing that a permit be modified and the RA determines that cause for modification exists.
 - e) Cause exists for termination under 40 CFR §147.2928, but the RA determines that permit modification is appropriate.

The modifications procedure described in 40 CFR §2927(c) must be followed to accomplish the modifications described in item "a" through "f" of this section.

2. Minor modifications do not require that the procedure listed in 40 CFR §147.2927(c) be followed.

Minor modifications consist of:

- a) Correcting typographical errors;
- b) Requiring more frequent monitoring or reporting;
- c) Changing ownership or operational control (see 40 CFR §147.2926, Permit Transfers); or

- d) Changing quantities or types of injected fluids, provided:
 - (i) The facility can operate within conditions of the permit;
 - (ii) The facility classification would not change.

The filing of a request by the permittee for a permit modification, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

G. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

H. Duty to Provide Information

The permittee shall furnish to the RA within a reasonable time any information which the RA requests to determine whether cause exists for modifying, revoking and reissuing or terminating this permit. The permittee shall also furnish to the RA, upon request, copies of records required to be kept by this permit.

I. Inspection and Entry

The permittee shall allow EPA representatives upon the presentation of credentials and other documentation to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records required by this permit are kept;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor, at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

J. Monitoring and Records

- 1. Samples and measurements taken for the purpose of monitoring shall be representative of the injection activity. The operator shall monitor the injection pressure (psi) and rate (bbl/day) once a month. Reporting of monitoring results shall be in accordance with procedures and at intervals prescribed in condition II.L.4 of this permit.
- 2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the RA at any time.

The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of any plugging and abandonment procedures specified under 40 CFR §147.2905. The RA may require the owner or operator to deliver the records to the RA at the conclusion of the retention period.

- 3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individuals who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;

- e. The analytical techniques or methods used including quality assurance techniques employed to insure the generation of reliable data; and
- f. The results of such analyses.
- 4. The owner/operator shall retain all monitoring records for three (3) years, unless an enforcement action is pending, and then until three (3) years after the enforcement action has been resolved.

K. Signatory Requirements

All applications, reports, or information submitted to the RA shall be signed and certified (see 40 CFR §147.2925(j)) by the injection facility owner/operator or his duly authorized representative.

L. Reporting Requirements

- 1. The owner/operator shall notify the Osage UIC office within 30 days of the date on which injection commenced.
- 2. Planned changes The permittee shall give advance notice to the RA of any planned changes which may result in noncompliance.
- 3. Transfers This permit is not transferable to any person except after notice to the RA.
 - a) Permits may be transferred to another permittee:
 - (1) If the current permittee notifies the RA by certified mail at least 10 days before the proposed transfer date; and
 - (2) If the notice includes a written agreement between the existing and new permittees containing:
 - (i) A specific date for transfer of permit responsibility, coverage and liability; and

- (ii) Assurance that the new permittee has a surety bond on file with BIA; and
- (3) If the RA does not respond with a notice to the existing permittee that the permit will be modified.
- b) If the conditions in paragraph (a) of this section are met, the transfer is effective on the date specified in paragraph (a) (2) (i).
- 4. Monitoring reports Monitoring results shall be reported annually on the EPA Annual Disposal/Injection Well Monitoring Report form or an identical format. The report shall specify the types of methods used to generate the monitoring data.
- 5. Compliance schedules Reports of compliance or noncompliance with, or any progress report on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each interim date and the final date of compliance.
- 6. Twenty-four hour reporting The permittee shall report to the Osage UIC office any noncompliance which may endanger an underground source of drinking water. The report shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- 7. The following shall be reported within 30 days of occurrence:
 - 1) Any monitoring reports or other information required under paragraph 6 that is not available within five (5) days.
 - 2) Any malfunction of the injection system including any mechanical failure or downhole problem involving well integrity, well workovers, or any noncompliance (Ref. 40 CFR §147.2922).
- 8. Other noncompliance The permittee shall report all instances of noncompliance not reported under paragraphs 6 and 7 of this section at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph L.6 of this section.
- 9. The permittee shall notify the Osage UIC office within 30 days of the date injection has terminated.
- 10. Other information When the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the RA, the permittee shall promptly submit such facts or information.

M. Additional Conditions

- 1. The operator of a well shall not allow the movement of fluid containing any contaminant into underground sources of drinking water if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect human health.
- 2. The owner/operator shall notify the Osage UIC office within 30 days of the date injection has terminated. The well must be plugged within one year after termination of injection. The RA may extend the time to plug, but only if no fluid movement into a USDW will occur, and the operator has presented a viable plan for utilizing the well within a reasonable time.

- 1. The permittee shall notify the Osage UIC office by certified mail at least five (5) days prior to the commencement of plugging operations. The notice must include that information prescribed at 40 CFR §147.2905(c).
- 2. Plugging and Abandonment The well shall be plugged in a manner which will not allow the movement of fluids either into or between underground sources of drinking water. Placement of cement plugs shall be accomplished by one of the methods described in 40 CFR §147.2905 or some other method approved by the RA.

The well to be abandoned shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the RA, prior to the placement of the cement plug(s).

N. Financial Responsibility

The permittee must demonstrate and maintain financial responsibility and resources to close, plug, and abandon the underground injection well. This shall be demonstrated by the submission of a surety bond to the Osage Agency Bureau of Indian Affairs.

O. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

P. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provisions to other circumstances, and the remainder of this permit, shall not be affected thereby.

Q. Explanation of Terms

Terms used in this permit are defined as follows:

"RA" - the EPA Regional Administrator

"UIC" - Underground Injection Control Program

"SDWA"/"the Act" - The Safe Drinking Water Act

"Osage UIC Office" - 625 Grandview Avenue, Osage Agency Campus, P. O. Box 1495, Pawhuska, OK 74056

Well Stimulation - means several processes used to clean the wellbore, enlarge channels, and increase pore space in the interval to be injected thus making it possible for wastewater to move more readily into the formation, and includes (1) surging, (2) jetting, (3) blasting, (4) acidizing, (5) hydraulic fracturing.

Other references to program - specific terms, acronyms and abbreviations shall mean those terms as defined by the UIC program regulations, 40 CFR 124, 144, 145, 146, 147 and the Safe Drinking Water Act.